

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference KAM/002PCT	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IL2004/000881	International filing date (day/month/year) 22 September 2004 (22.09.2004)	Priority date (day/month/year) 22 September 2003 (22.09.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KAMADA LTD.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Date of issuance of this report 27 March 2006 (27.03.2006) Authorized officer Simin Baharlou Telephone No. +41 22 338 71 30
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
CYNTHIA WEBB
WEBB & ASSOCIATES
PO BOX 2189
REHOVOT, ISRAEL 76121

REC'D 27 JUN 2005

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **23 JUN 2005**

Applicant's or agent's file reference

KAM/002 PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/IL04/00881

International filing date (day/month/year)

22 September 2004 (22.09.2004)

Priority date (day/month/year)

22 September 2003 (22.09.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): C07K 17/00, 14/00, 1/00; A61K 35/14, 38/04; A23J 1/00 and US Cl.: 530/416, 380, 392, 393, 395, 412, 427, 830,

Applicant

KAMADA LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US

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Commissioner for Patents
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Authorized officer

Achuthanurthy ponnathapura

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL04/00881

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IL04/00881

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-24</u>	YES
	Claims <u>25-39</u>	NO
Inventive step (IS)	Claims <u>1-24</u>	YES
	Claims <u>25-39</u>	NO
Industrial applicability (IA)	Claims <u>1-39</u>	YES
	Claims <u>None</u>	NO

2. Citations and explanations:

Lebing et. al (US patent 6,462,180 B1). Lebing et. al (US PAT 6,462,180 B1) discloses a method of purifying API polypeptide, and formulations thereof greater than 90% pure and an API as much as 100% active from Cohn fraction IV-1. Steps of removing contaminating lipids and proteins using polyethylene glycol, exclusion of enveloped and non-enveloped viruses by nanofiltration, use of non-citrate buffer such as phosphate buffer, anion and cation exchange chromatography, are taught by Lebing et. al. Ralson et. al (US patent 6,093,804) also disclose a method of purifying API polypeptide, and pharmaceutical formulations thereof with at least 90% active API including steps of removing contaminating lipids and proteins using polyethylene glycol, exclusion of enveloped and non-enveloped viruses by nanofiltration, use of non-citrate buffer such as phosphate buffer, anion and cation exchange chromatography. However the present application encompasses the extra step of using anion exchange chromatography following the cation exchange chromatography and the use of acetate-based buffer throughout the purification of API was not described by the above references or other prior art disclosures. Therefore the process of API purification using the steps in claims 1-24 are novel and unobvious. However the purified API, the level of purity, the pharmaceutical formulations and the treatment methods disclosed in claims 25-39 do not constitute novelty since an API of equal or greater purity, pharmaceutical formulations and the treatment methods are disclosed by Lebing et. al (US PAT 6,462,180 B1) and Ralson et. al (US patent 6,093,804).